

Appendix 6. Measuring stock status.

Following Kleisner *et al.* (2012), we assessed the stock status of the 10 main fish species caught by artisanal and industrial sectors per year. This calculation used the categories of exploitation that were most frequent over the last 10 years of the temporal series, such as developing, exploited, rebuilding, overexploited and collapsed. The score of the stock status variable ranged from 0 (least vulnerable) to 1 (most vulnerable), which we assigned points as follows: developing = 0 points, exploited = 0.4 points, rebuilding = 0.5 points, overexploited = 0.8 points, and collapsed = 1 point.

*Table A6.1: Stock status assessment of the 10 fish species caught along the Brazilian coastline by artisanal and industrial sectors. *These were not identified at the species level, so we used the average value of the categories for the two more frequent species in that state.*

STATES	SPECIES	STOCK STATUS	SCORE
AP	Sciades parkeri	overexploited	0.8
AP	Cynoscion acoupa	exploited	0.4
AP	Sciades couma	exploited	0.4
AP	Coryphaena hippurus	exploited	0.4
AP	Micropogonias furnieri	exploited	0.4
AP	Sciades proops	exploited	0.4
AP	Cynoscion virescens	overexploited	0.8
AP	Megalops atlanticus	rebuilding	0.5
AP	Bagre bagre	exploited	0.4
AP	Lutjanus purpureus	overexploited	0.8
PA	Cynoscion acoupa	exploited	0.4
PA	Sciades parkeri	overexploited	0.8
PA	Scomberomorus brasiliensis	exploited	0.4
PA	Lutjanus purpureus	overexploited	0.8
PA	Sciades proops	exploited	0.4
PA	Cynoscion microlepidotus	exploited	0.4
PA	Sciades herzbergii	overexploited	0.8
PA	Macrodon ancylodon	exploited	0.4
PA	Coryphaena hippurus	exploited	0.4
PA	Sciades couma	exploited	0.4
MA	Cynoscion acoupa	exploited	0.4
MA	Macrodon ancylodon	exploited	0.4

MA	<i>Hexanematichthys herzbergii</i>	overexploited	0.8
MA	<i>Scomberomorus brasiliensis</i>	exploited	0.4
MA	<i>Aspistor quadriscutis</i>	exploited	0.4
MA	<i>Micropogonias furnieri</i>	exploited	0.4
MA	<i>Sciades proops</i>	exploited	0.4
MA	<i>Bagre bagre</i>	exploited	0.4
MA	<i>Cynoscion leiarchus</i>	overexploited	0.8
MA	<i>Genyatremus luteus</i>	overexploited	0.8
PI	<i>Lutjanus synagris</i>	exploited	0.4
PI	<i>Scomberomorus brasiliensis</i>	exploited	0.4
PI	<i>Scomberomorus cavalla</i>	exploited	0.4
PI	<i>Euthynnus alletteratus</i>	exploited	0.4
PI	<i>Ocyurus chrysurus</i>	exploited	0.4
PI	<i>Lutjanus purpureus</i>	overexploited	0.8
PI	<i>Micropogonias furnieri</i>	exploited	0.4
PI	<i>Conodon nobilis</i>	overexploited	0.8
PI	<i>Chloroscombrus chrysurus</i>	exploited	0.4
PI	<i>Lycengraulis grossidens</i>	exploited	0.4
CE	<i>Ocyurus chrysurus</i>	exploited	0.4
CE	<i>Opisthonema oglinum</i>	exploited	0.4
CE	<i>Scomberomorus cavalla</i>	exploited	0.4
CE	<i>Lutjanus synagris</i>	exploited	0.4
CE	<i>Scomberomorus brasiliensis</i>	exploited	0.4
CE	<i>Haemulon plumierii</i>	exploited	0.4
CE	<i>Chloroscombrus chrysurus</i>	exploited	0.4
CE	<i>Carangoides bartholomaei</i>	exploited	0.4
CE	<i>Mycteroperca bonaci</i>	overexploited	0.8
CE	<i>Lutjanus purpureus</i>	overexploited	0.8
RN	<i>Xiphias gladius</i>	exploited	0.4
RN	<i>Thunnus albacares</i>	exploited	0.4
RN	<i>Opisthonema oglinum</i>	exploited	0.4
RN	<i>Hirundichthys affinis</i>	overexploited	0.8
RN	<i>Thunnus obesus</i>	overexploited	0.8
RN	<i>Scomberomorus brasiliensis</i>	exploited	0.4
RN	<i>Prionace glauca</i>	exploited	0.4
RN	<i>Xyrichtys novacula</i>	overexploited	0.8
RN	<i>Haemulon plumierii</i>	exploited	0.4
RN	<i>Ocyurus chrysurus</i>	exploited	0.4
PB	<i>Thunnus albacares</i>	exploited	0.4
PB	<i>Thunnus obesus</i>	overexploited	0.8
PB	<i>Xiphias gladius</i>	exploited	0.4
PB	<i>Thunnus alalunga</i>	overexploited	0.8
PB	<i>Prionace glauca</i>	exploited	0.4

PB	<i>Mugil curema</i>	collapsed	1
PB	<i>Istiophorus platypterus</i>	overexploited	0.8
PB	<i>Centropomus undecimalis</i>	exploited	0.4
PB	<i>Trachinotus falcatus</i>	overexploited	0.8
PB	<i>Scomberomorus brasiliensis</i>	exploited	0.4
PE	<i>Anchovia clupeioides</i>	exploited	0.4
PE	<i>Thunnus albacares</i>	exploited	0.4
PE	<i>Pseudupeneus maculatus</i>	exploited	0.4
PE	<i>Mugil curema</i>	collapsed	1
PE	<i>Opisthonema oglinum</i>	exploited	0.4
PE	<i>Haemulon aurolineatum</i>	rebuilding	0.5
PE	<i>Conodon nobilis</i>	overexploited	0.8
PE	<i>Sparisoma spp_axillare</i>	exploited	0.4
PE	<i>Lutjanus analis</i>	exploited	0.4
PE	<i>Acanthocybium solandri</i>	rebuilding	0.5
AL	<i>Mugil curvidens</i>	exploited	0.4
AL	<i>Opisthonema oglinum</i>	exploited	0.4
AL	<i>Macrodon ancylodon</i>	exploited	0.4
AL	<i>Caranx hippos</i>	exploited	0.4
AL	<i>Diapterus auratus</i>	exploited	0.4
AL	<i>Scomberomorus brasiliensis</i>	exploited	0.4
AL	<i>Balistes vetula</i>	rebuilding	0.5
AL	<i>Scomberomorus cavalla</i>	exploited	0.4
AL	<i>Mugil liza</i>	rebuilding	0.5
AL	<i>Sciades herzbergii</i>	overexploited	0.8
SE	<i>Mugil curema</i>	collapsed	1
SE	<i>Macrodon ancylodon</i>	exploited	0.4
SE	<i>Sciades herzbergii</i>	overexploited	0.8
SE	<i>Anchoviella vaillanti</i>	overexploited	0.8
SE	<i>Caranx hippos</i>	exploited	0.4
SE	<i>Micropogonias furnieri</i>	exploited	0.4
SE	<i>Diapterus rhombeus</i>	overexploited	0.8
SE	<i>Cathorops spixii</i>	overexploited	0.8
SE	<i>Scomberomorus cavalla</i>	exploited	0.4
SE	<i>Conodon nobilis</i>	overexploited	0.8
BA	<i>Sardinella brasiliensis</i>	rebuilding	0.5
BA	<i>Ocyurus chrysurus</i>	exploited	0.4
BA	<i>Opisthonema oglinum</i>	exploited	0.4
BA	<i>Diapterus rhombeus</i>	overexploited	0.8
BA	<i>Cetengraulis edentulus</i>	rebuilding	0.5
BA	<i>Lutjanus jocu</i>	exploited	0.4
BA	<i>Coryphaena hippurus</i>	exploited	0.4
BA	<i>Mycteroperca spp_bonaci</i>	overexploited	0.8

BA	<i>Caranx crysos</i>	exploited	0.4
BA	<i>Pomacanthus paru</i>	exploited	0.4
ES	<i>Coryphaena hippurus</i>	exploited	0.4
ES	<i>Balistes capriscus</i>	overexploited	0.8
ES	<i>Thunnus albacares</i>	exploited	0.4
ES	<i>Ocyurus chrysurus</i>	exploited	0.4
ES	<i>Trachurus lathami</i>	rebuilding	0.5
ES	<i>Pagrus pagrus</i>	rebuilding	0.5
ES	<i>Caranx crysos</i>	exploited	0.4
ES	<i>Katsuwonus pelamis</i>	exploited	0.4
ES	<i>Lutjanus purpureus</i>	overexploited	0.8
ES	<i>Coryphaena hippurus</i>	exploited	0.4
RJ	<i>Sardinella brasiliensis</i>	rebuilding	0.5
RJ	<i>Cetengraulis edentulus</i>	rebuilding	0.5
RJ	<i>Katsuwonus pelamis</i>	exploited	0.4
RJ	<i>Stephanolepis hispidus</i>	collapsed	1
RJ	<i>Scomber colias</i>	collapsed	1
RJ	<i>Micropogonias furnieri</i>	exploited	0.4
RJ	<i>Caranx latus</i>	exploited	0.4
RJ	<i>Thunnus albacares</i>	exploited	0.4
RJ	<i>Opisthonema oglinum</i>	exploited	0.4
RJ	<i>Lophius gastrophysus</i>	overexploited	0.8
SP	<i>Sardinella brasiliensis</i>	rebuilding	0.5
SP	<i>Micropogonias furnieri</i>	exploited	0.4
SP	<i>Cynoscion jamaicensis</i>	overexploited	0.8
SP	<i>Anchoviella lepidentostole</i>	exploited	0.4
SP	<i>Macrodon atricauda</i>	overexploited	0.8
SP	<i>Scomber colias</i>	collapsed	1
SP	<i>Lophius gastrophysus</i>	overexploited	0.8
SP	<i>Xiphias gladius</i>	exploited	0.4
SP	<i>Mugil liza</i>	rebuilding	0.5
SP	<i>Coryphaena hippurus</i>	exploited	0.4
PR	<i>Sardinella brasiliensis</i>	rebuilding	0.5
PR	<i>Harengula clupeola</i>	overexploited	0.8
PR	<i>Chloroscombrus chrysurus</i>	exploited	0.4
PR	<i>Micropogonias furnieri</i>	exploited	0.4
PR	<i>Opisthonema oglinum</i>	exploited	0.4
PR	<i>Cynoscion virescens</i>	overexploited	0.8
PR	<i>Oligoplites spp_saurus_saliens*</i>	collapsed/rebuilding	0.75
PR	<i>Pogonias cromis</i>	collapsed	1
PR	<i>Macrodon atricauda</i>	overexploited	0.8
PR	<i>Mugil liza</i>	rebuilding	0.5
SC	<i>Sardinella brasiliensis</i>	rebuilding	0.5

SC	<i>Katsuwonus pelamis</i>	exploited	0.4
SC	<i>Micropogonias furnieri</i>	exploited	0.4
SC	<i>Opisthonema oglinum</i>	exploited	0.4
SC	<i>Umbrina canosai</i>	exploited	0.4
SC	<i>Prionotus punctatus</i>	exploited	0.4
SC	<i>Urophycis mystacea</i>	exploited	0.4
SC	<i>Cynoscion guatucupa</i>	exploited	0.4
SC	<i>Chloroscombrus chrysurus</i>	exploited	0.4
SC	<i>Mugil liza</i>	rebuilding	0.5
RS	<i>Micropogonias furnieri</i>	exploited	0.4
RS	<i>Umbrina canosai</i>	exploited	0.4
RS	<i>Cynoscion guatucupa</i>	exploited	0.4
RS	<i>Katsuwonus pelamis</i>	exploited	0.4
RS	<i>Macrodon atricauda</i>	overexploited	0.8
RS	<i>Prionotus punctatus</i>	exploited	0.4
RS	<i>Pomatomus saltatrix</i>	collapsed	1
RS	<i>Mugil liza</i>	rebuilding	0.5
RS	<i>Urophycis brasiliensis</i>	exploited	0.4
RS	<i>Thunnus albacares</i>	exploited	0.4